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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HALIYUR, VENKATESH N

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,839

Applicant(s)

SUUMAKI ET AL.

Examiner

Venkatesh Haliyur

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 02/08/2006 is insufficient to overcome the rejection of claims 1-10 based upon the claim rejections under 35 USC 103(a) as set forth in the last Office action because the prior art of reference(s) discloses the claim limitations. Please see the rejections below.

2. Claims 1 - 10 is pending in the application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1,7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 & 7 are not clear and should be modified to particularly point out and distinctly claim the subject matter as suggested by the examiner or in similar terms.

Claim 1: "A method for configuring use of a compression method in a terminal in a packet switched mobile system (modify to recite as **A method for configuring a**

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plurality of compression methods in a terminal communicating with a packet switched mobile system), wherein characteristics parameters are specified for a terminal, the said characteristic parameters comprising *at least the compression methods (modify to recite as at least one of the compression methods)*the method comprising:

configuring use of the compression method (modify to recite as configuring at least one of the said compression methods in the system) on simultaneous radio bearers of the terminal in said functional entity on the basis of the characteristics parameters transmitted by the terminal"

Claim 7: A terminal of a mobile communication system, the terminal comprising means for allowing a user of the terminal to update the parameters specifying *the compression methods (modify to recite as one of the plurality of compression methods)* of the terminal in the terminal and for which terminal characteristics parameters are specified that comprise *at least the compression methods (modify to recite as one of the said compression methods)* supported by the terminal, the terminal being arranged to: modify the characteristics parameters of the terminal in accordance with said update, transmit the modified characteristics parameters to the radio network of the mobile communication system, and receive from the radio network the settings of the use of a compression method on each simultaneous radio bearer of the terminal specified on the basis of said modified characteristics parameters.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hannu et al [US Pub: US 2002/0057715] in view of Hamalainen et al [US Pat: 6,434,133].

Regarding claims 1,7, Hannu et al in their invention of "Communication system and method utilizing request-reply communication patterns for data compression" disclosed a method for configuring a compression method in a packet switched mobile system **(Figs 1-2)**, wherein characteristics parameters are specified for a terminal **(item 110 of Fig 1)**, the characteristic parameters comprising a compression method supported by the terminal, and wherein a functional entity **(compression/decompression algorithms)** is configured in a radio network **(Fig 1)** for configuring the compression method to a radio bearer **[para 001-0029]** and configuring use of a compression method on simultaneous radio bearers **(items 110 and 150 of Fig 1)** of the terminal in said functional entity **(entities A & B of Fig 2)** on the basis of the characteristics parameters **(messages containing compression/decompression methods called dictionary)** transmitted by the terminal, allowing a user of the terminal to update the parameters specifying the compression methods of the terminal in the terminal,

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modifying the characteristics parameters of the terminal in accordance with said update, transmitting the modified characteristics parameters to said functional entity comprised by the radio network (**para 0027-0034**), and configuring the use of a compression method for each simultaneous radio bearer on the basis of the modified characteristics parameters [**Figs 1-2, para 0001-0034, abstract**] but, Hannu et al fails to disclose configuring the use of a compression method for each simultaneous radio bearer on the basis of the modified characteristics parameters.

However, Hamalainen et al in their invention of "Subnetwork dependent convergence protocol for a mobile radio network" disclosed a method for configuring different protocol compression/decompression algorithms through the exchange of a set of parameters (**col 4, lines 34-67, col 5, lines 1-32**) between several entities simultaneously in a GSM network [**Figs 1-3, cols 1-5, lines 1-67, col 6, lines 1-32,abstract**].

Therefore it would have been obvious for one of ordinary skill in the art at the time that the invention was made to use the teachings of Hamalainen et al on the method of configuring different protocol compression/decompression algorithm through the exchange of set of parameters between several entities simultaneously in the system of Hannu et al to configure the use of a compression method for each simultaneous radio bearer on the basis of the modified characteristics parameters. One is motivated as such in order to provide a reliable and easy user access to update and modify compression methods for each simultaneous radio bearers on the basis of the

transmitted characteristics parameters to increase the bandwidth and minimize the delay in the communication path between the radio bearers.

Regarding claims 2,8 Hannu et al, disclosed a mechanism for not performing updates of modified compression/decompression dictionary until a communication entity has been established or has new part of the dictionary has been transmitted (**para 0043**), but fails to disclose transmitting modified characteristics parameters before a radio bearer is established.

However, Hamalainen et al disclosed a method for that each compression /decompression algorithm defined is negotiated between the entities prior to the compression and transmission of SNDCP units containing this data [**col 5, lines 46-58**].

Therefore it would have been obvious for one of ordinary skill in the art at the time that the invention was made to use the teachings of Hamalainen et al the method of negotiating compression/decompression algorithms between the entities prior to the compression and transmission of protocol and user data in the system of Hannu et al for transmitting modified characteristics parameters to a functional entity comprised by the radio network before a radio bearer is established. One is motivated as such in order to provide a reliable and easy user access to update and modify compression methods for each simultaneous radio bearers are pre negotiated to minimize the delay in establishing the communication path between the radio bearers.

Regarding claims 3,9, Hannu et al disclosed a method for transmitting and receiving the default and modified compression/decompression dictionary method during an established communication session between the entities (**para 0030**), but fails

to disclose reconfiguring the use of the compression methods of the simultaneous radio bearers of the terminal on the basis of the modified characteristics parameters without releasing the radio bearers. However, Hamalainen et al disclosed a method for reconfiguring different protocol compression/decompression algorithm through the exchange of parameters between several entities simultaneously in a GSM network without releasing the bearers **[Fig 3, column 2, lines 51-67, column 3, lines1-55]**.

Therefore it would have been obvious for one of ordinary skill in the art at the time that the invention was made to use the teachings of Hamalainen et al the method of configuring different protocol compression/decompression algorithm through the exchange of parameters between several entities simultaneously in the system of Hannu et al to receive new settings for the use of a compression method specified in the radio network on the basis of the modified characteristics parameters, and reconfigure the settings of the use of the compression methods of the simultaneous radio bearers of the terminal without releasing the radio bearers. One is motivated as such in order to provide a reliable and easy user access to update, modify and reconfigure compression methods and for each simultaneous radio bearers without releasing the radio bearers by minimizing the set-up time delays to improve the efficiency of the communication path.

Regarding claim 4, Hannu et al disclosed a method of message flow during a communication session between entities indicating available protocol and data compression/decompression method for packet-switched (IP) UMTS systems at any instant **(Fig 1-2, para 0011,0027-0032)**.

Regarding claims 5,6,10, Hannu et al disclosed the messages containing the compression methods of entities of the radio bearers (**para 0032-34**), but fails to disclose the message comprising a selection parameter for the header field compression method for data packets supported by the convergence protocol of the terminal that the message specifying the characteristics parameters being an information message comprising a selection parameter for the header field and a selection parameter for the user data compression method for data packet supported by the convergence protocol of the terminal. However, Hamalainen et al disclosed a method for one or more compression control message, specifying a set of characteristics parameters for selecting the compression/decompression algorithm supported by the convergence protocol of the terminal for the user data compression **[col 4, lines 1-67,col 5, lines 1-4]**.

Therefore it would have been obvious for one of ordinary skill in the art at the time that the invention was made to use the teachings of Hamalainen et al the method of specifying a set of characteristics parameters for selecting the compression /decompression algorithm for user data in the system of Hannu et al for specifying the characteristics parameters in the information message comprising a selection parameter for the header field and data compression methods for data packets supported by the convergence protocol of the terminal. One is motivated as such in order to provide a reliable and easy user access to update and modify compression methods based on selecting header and user data characteristic parameters in the message for the user of the radio bearer terminals to minimize the compression delays.

Response to Arguments

7. Applicant's arguments, see remarks filed on 02/08/2006 have been fully considered but they are not persuasive because Examiner respectfully traverses the applicants to the prior art of reference(s) Hannu et al and Hamalainen et al as follows,

a. paragraphs 3-6, pp 6-7 of remarks: prior art of references disclosed the ability of the user terminal to select, update and modify compression method based on set of parameters (codebooks or dictionary columns) in their inventions (Hannu et al, para 0027-0034, abstract, Hamalainen et al, col 3, lines 24-67, col 4, lines 34-67,abstract).

b. paragraphs 7-11, pp 7-8 of remarks: Hannu et al and Hamalainen et al disclosed their invention in the related art, it is obvious for one of the ordinary skill in the art to include a set of parameters for selecting a compression method in the messages by a user entity as taught by Hamalainen et al in the system of Hannu et al to select, update and modify compression methods automatically or for manual selection by the user of the terminal (Hannu et al, para 0027-0034, Hamalainen et al, col 3, lines1-67, col 4, lines 1-67).

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

9. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached @ (571)-272-3139. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Examiner

MW
04/17/06



Ajit Patel
Primary Examiner